Exploring perception and use of everyday language and medical terminology among international medical graduates in a medical ESP course in Australia

Maria R. Dahm *

Department of Linguistics, Macquarie University, Sydney, Australia

Abstract

Language and communication skills are among the greatest challenges that non-native-English speaking international medical graduates (IMGs) face in English medical consultations. Especially when patients use unfamiliar everyday expressions or attach different meanings to medical terminology, the communicative burden on doctor–patient communication may be increased. This exploratory study investigates how IMGs attend to everyday language and medical terminology in a professional English for Specific Purposes (ESP) course, and whether or not they are aware that patients and medical professionals may interpret or perceive medical terminology differently. To provide preliminary answers, the IMGs’ approach to and use of two specific communication skills was studied: (1) clarifying unclear patient statements and (2) using easily comprehensible language and avoiding or explaining jargon. Two groups of IMGs were observed for a period of approximately three months during a medical professional ESP course in Australia. Data were gathered in form of field notes and artefacts. Findings indicate that participants are only marginally aware of terminological divergences. Concerning the targeted communication skills, the limited English proficiency of many IMGs was often found to result in a mismatch between proposed and executed actions. Implications for teachers of professional ESP training courses are highlighted.

© 2011 Elsevier Ltd. All rights reserved.

1. Introduction

Despite making a vital contribution to the significant shortage of trained medical personnel in the Australian healthcare workforce, the presence of non-native-English speaking (NNES) international medical graduates (IMGs) in Australia is not viewed without criticism (Birrell & Schwartz, 2007; Pilotto, Duncan, & Anderson-Wurf, 2007). IMGs often have to cope with an inadequate knowledge of the Australian healthcare system, a, mostly unfamiliar, patient-centred model of medical care, a lack of available support structures, as well as language and communication difficulties; all challenges which might jeopardize the success of their medical encounters (McDonnell & Usherwood, 2008).

Among the difficulties faced by IMGs, English proficiency takes on a particularly crucial role. Hoekje (2007), who takes a medical discourse approach, argues that English for Specific Purposes (ESP) programs for IMGs should be contextualized and cover all types of language necessary to communicate with the patient communities in question. It follows that the English language abilities of IMGs must be conceptualized to encompass knowledge of both everyday and technical English (medical...
terminology), as both can affect receptive and productive language skills important for successful doctor–patient communication.

Concerning receptive skills, it has been noted that IMGs may have problems following patient narratives if these include unfamiliar everyday language, idioms or colloquialisms (cf. Hoekje, 2007). In relation to medical ESP programs, Webber (1995) calls attention to the fact that:

[...] in 90% of cases, it is not the technical vocabulary which the students [in a medical English classroom] do not know anyway, but the [...] subtechnical or general lexis: they recognise “polydipsia” but may not know the word “thirst” (p. 60)

Similarly, IMGs and their supervisors in McDonell and Usherwood’s (2008) interview-based study report persisting communication problems relating to understanding ‘Australian jargon’ (p. 482).

With regard to production skills, IMGs may experience difficulties finding the appropriate balance between medical terminology and everyday language. Tasks such as providing appropriate and accurate diagnostic information or explaining treatment options may become problematic if IMGs struggle to find everyday language alternatives for specialist terms (Majumdar, Keystone, & Cuttress, 1999; Pilotto et al., 2007).

While everyday vocabulary deficits among IMGs are relatively well-known, terminological issues, such as ‘the ability to choose the appropriate terminology, register, and amount of information for different audiences’ (Pilotto et al., 2007, p. 227) are only starting to be addressed. Unfortunately, only relatively few studies have investigated the more ‘global’ impact that the use of medical terminology can have on consultations. Findings suggest that patients and doctors often differ in their interpretations of medical terms, as well as their perception of what does and does not constitute a medical term (Bourhis, Roth, & MacQuen, 1989; Hadlow & Pitts, 1991; Hoekje, 2007; Koch-Weser, Dejong, & Rudd, 2009). The dearth of studies investigating medical terminology is even more pronounced in English-medium medical encounters that involve NNES patients and/or NNES IMGs. The degree to which IMGs are conscious of divergences in the perception and interpretation of medical terms remains unknown. Yet, it stands to reason that if such awareness is limited, the danger of communication breakdown increases and successful doctor–patient communication is placed at risk.

The present study takes a first step towards closing this research gap and seeks to provide preliminary insights into whether IMGs are aware of divergences in meaning and perception relating to medical terminology. To this end, this article explores the beliefs and strategies IMGs adopt with regard to two specific clinical communication skills: (1) clarifying unclear patient statements and (2) using easily comprehensible language and avoiding or explaining jargon. Findings are based on observations conducted during a role-play based medical language bridging course designed for IMGs offered by the Royal Australian College of General Practitioners (RACGP). Box 1 provides a summary of the research questions.

Box 1 Summary of research questions.

1. Meaning divergences
   To what extents are IMGs aware of meaning divergences in the perception and interpretation of medical terms?
   Can IMGs distinguish general from technical lexis?
2. Clarifying unclear patient statements
   What strategies do IMGs cite for dealing with unfamiliar lexical items? Do they use these strategies efficiently?
   For which lexical items do they seek clarification from their patients?
3. Using easily comprehensible language and avoiding or explaining jargon
   What strategies do IMGs cite for using easily comprehensible language and attending to jargon? Do they use these strategies efficiently? Which lexical items do they explain to their patients?

2. A framework for teaching communication skills in medicine

The handbook Skills for communicating with patients developed by Silverman, Kurtz and Draper (in 1998 and updated in 2005) has become widely used in teaching medical communication skills, because, amongst other things, it provides a sophisticated framework (Cegala & Broz, 2002; Silverman et al., 2005).

In their work, Silverman and colleagues have identified three interrelated sets of skills necessary for successful doctor–patient communication and placed them within an overall framework following the pattern of an average consultation: from ‘initiating the session’, ‘gathering information’ and a ‘physical examination’, to providing an ‘explanation’, ‘planning’ further actions and ‘closing the session’, while also simultaneously ‘structuring’ the consultation and ‘building relationships’ with the patient (Silverman et al., 2005, p. 17). The skills required by doctors to successfully manoeuvre within this framework include:

• content skills – concerning the gathering of medical information such as symptoms from the patient;
• process skills – relating, for example, to the manner in which doctors phrase questions or structure turns; and
perceptual skills – regarding internal actions, such as arriving at differential diagnoses that drive the interaction (Silverman et al., 2005: 10).

Some of the 71 process skills outlined by Silverman et al. (2005, pp. 22–26) pose specific challenges to IMGs considering that these doctors have difficulties with the use and meaning of everyday language (Pilotto et al., 2007; Webber, 1995). Given the limited scope of this paper, the focus here is exclusively on two process skills in particular. A successful communicator:

- Clarifies patient’s statements that are unclear or need amplification (e.g. “Could you explain what you mean by light headed”).
- Uses concise, easily understood questions and comments; avoids or adequately explains jargon. [and]
- Uses concise, easily understood language; avoids or explains jargon.1 (Silverman et al., 2005, pp. 22 and 24, their emphasis):

Below it is argued that IMGs may experience significant difficulties in acquiring and applying these particular process skills because of (a) their limited English proficiency and (b) the flexible nature and shifting meaning of (semi-technical) medical terminology (cf. Dahm, 2010).

2.1. Potential pitfalls for IMGs acquiring and applying process skills

2.1.1. Limited English proficiency

It can be assumed that IMGs with limited English proficiency will need to clarify significantly more patient statements than native-English speaking (NES) doctors. While asking for clarification may help reduce the incidence of misunderstanding between patients and doctors, excessive use of this strategy may undermine a patient’s confidence in their doctor and turn out to be rather time-consuming. In addition, IMGs may have trouble in identifying what is likely to be ‘medical jargon’ from the perspective of the patient and this, in turn, will create additional complications in deciding when and how to avoid or explain jargon. For example, as NNES, IMGs may fail to correctly distinguish medical terms which are generally restricted to use within a ‘medical domain’ from those which also have a place in everyday vocabulary. As a result, they may spend precious consultation time unnecessarily explaining words like X-ray or ovulate. This also raises the issue of tailoring one’s explanations to individual patients, as IMGs need to make correct judgments about whether or not a term such as ovulate will have to be explained to each and every patient.

2.1.2. Flexible nature and shifting meaning of (semi-technical) medical terminology

Differences in understanding and perception of medical terminology between doctors and patients can be addressed from a range of theoretical backgrounds, such as diverging knowledge schemas (Tannen & Wallat, 1987), varying levels of deep word knowledge (Read, 2004) or the flexible nature and shifting meaning of (semi-technical) medical terminology (Chung, 2003; Nation, 2001; also cf. Dahm, 2010). While all of these are very important concepts in discussing the impact of technical terminology used in doctor–patient communication only the latter approach was adopted here to stay within the overall scope of the paper.

Even seemingly straightforward terms, like diarrhoea, may give rise to miscommunication in consultations if doctors and patients attach different meanings to them (Gittelman, Mahabee-Gittens, & Gonzalez-del-Rey, 2004). Most problems concerning the interpretation of medical language involve the use of semi-technical terms (Hadlow & Pitts, 1991; Hoekje, 2007). These lexical items carry both lay and medical meanings and are particularly prone to be understood differently by patients and doctors. Such diverging interpretations can have various effects on actual practice, ranging from mere irritation to unresolved miscommunication and can even pose threats to optimal care (Cooke, Wilson, Cox, & Roalf, 2000; Tannen & Wallat, 1987). Consequently, patients’ understanding of (semi-technical) terms should not be taken at face value, even if patients use these terms frequently (Cooke et al., 2000; Gittelman et al., 2004; Silverman et al., 2005). Despite a growing body of literature examining the difficulties that IMGs face in Australia, it remains unknown to what extent they are aware of meaning divergences and whether they seek clarification about what their patients actually mean when using semi-technical terms.

Differences in perception of medical terms also exist between medical professionals and patients. When examining how patients, doctors and nurses evaluated the use of medical language, Bourhis et al. (1989) found that doctors seemed to perceive many terms that are frequently used in medical settings as items from everyday language, and only classified less frequently used medical terms as ‘real’ medical terms. Patients, in comparison, being (as a group) less unaccustomed to medical language, were considerably more inclusive in their views of what constituted a ‘medical term’. As a consequence, they rated the amount of medical language used by doctors significantly higher than did the doctors themselves.

1 In correspondence with the Calgary-Cambridge Guides this skill is listed twice, under ‘gathering information’ and under ‘explanation and planning’ (Silverman et al., 2005: 22–26).
Considering that doctors may not always be accurate in their assessment of whether patients fully comprehend the terms used in consultations, it stands to reason that they may provide inadequate explanations because they presuppose mutual intelligibility where none exists (Bourhis et al., 1989). Similarly, IMGs in the Australian context might not acknowledge the need to explain a term, because in their eyes they are using easily understandable language. At the same time, and as previously noted, it is hypothesised that their limited English proficiency might lead them to treat some everyday vocabulary items as medical terms and provide redundant explanations.

3. Methods

3.1. Setting

From 2006 the RACGP has been offering a series of clinical and cultural workshops for IMGs as part of a government-funded permanent resident overseas trained doctors training subsidies project. In July 2008 an RACGP medical language bridging course (RMLBC) was introduced to further increase the number of available specialized training resources for international doctors (RACGP, 2006, 2009).

The weekly RLMBC runs for 9 weeks with each class lasting 3 hours. The course makes extensive use of role-plays coupled with educator and peer feedback to prepare IMGs for the role-play-based, Australian Medical Council (AMC) clinical exams, which are obligatory for accreditation in Australia (McLean & Bennett, 2008). Furthermore, the RMLBC promotes the communication skills needed for primary care consultation in Australia and raises awareness regarding culturally sensitive topics, such as how to approach mental health issues or break bad news. The course is facilitated by a teacher of English as a second language who holds extensive experience in medical communication training (henceforth ‘language educator’ [LE]). The LE also acts as the simulated patient during all role-plays. In addition, a medical educator (ME) is present at three of the classes to offer clinical insights and provide input when questions of a medical nature arise.

The study was conducted with the approval of the RACGP and the Macquarie University Human Research Ethics Committee. For this study, I observed IMGs participating in the 2009 February (group 1) and July (group 2) instalments of the RMLBC. The observation period varied between 7 weeks (21 h) for group 1 and 4 weeks (12 h) for group 2. During my first visit to each group I briefly introduced the premise of my research and offered the IMGs 1 week to decide on whether they agreed to participate in the study.

Each of the sessions observed for this study followed a similar structure. After a brief introduction of the day’s topics, the LE and IMGs jointly discussed the language bank(s) (see Section 3.3) related to the topic at hand; then role-plays, educator feedback and group discussion followed. The IMGs sat in a half circle facing a desk and two chairs that were used for the role-plays and were arranged to resemble a general practice office setting. Subsequent to the role-plays and feedback discussions, the LE reviewed useful strategies or common pitfalls before the next topic was introduced. Generally two or three role-plays were conducted per topic, with no more than three topics covered in any one session.

3.2. Participants

To reduce the IMGs’ awareness of being observed, which had the potential to alter their behaviour during the observations, I took several measures to desensitize participants to my presence (Perry, 2005; Richards, 2003). Firstly, no data was collected in the initial two sessions, allowing IMGs to become accustomed to my presence during the class. Note taking

<table>
<thead>
<tr>
<th>Table 1</th>
<th>IMG demographics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample/Gender</td>
<td>Observation period</td>
</tr>
<tr>
<td>Group 1 (N = 15)</td>
<td>7 weeks (21 h)</td>
</tr>
<tr>
<td></td>
<td>73.3% female</td>
</tr>
<tr>
<td>Group 2 (N = 14)</td>
<td>4 weeks (12 h)</td>
</tr>
<tr>
<td></td>
<td>26.7% female</td>
</tr>
</tbody>
</table>

2 Given the great emphasis on role-plays in the course the exercises involve only ‘patients’ as simulated by the LE. However, the label patient will be used to refer to the LE role in the role-plays.
was kept inconspicuous by assuming a minimally intrusive position behind the medical graduates (cf. Richards, 2003). This position still allowed me to view the class but took me out of the participants' line of sight (unless they physically turned around). Lastly, in an effort to decrease the formality of the participant–observer relationship, I mingled informally with the participants before class and during breaks, and always remained open to any questions regarding the observation (Perry, 2005).

There were no general English language proficiency requirements for enrolment in the RLMBC. However, as most of the participating IMGs were seeking registration as doctors, to work in Australia they would need to provide evidence of their language proficiency requirements by, for example, achieving an overall minimum band score of 7 in the academic module of the IELTS test, or an overall pass with no grade below B in all bands of the Occupational English Test (OET; Medical Board of Australia, 2010). Table 1 provides detailed demographic data obtained for both observed groups.

3.3. Data collection

Following conditions outlined in the RACGP approval I was not permitted to collect video or audio recordings of the class interactions. I therefore gathered data in the form of notes and written artefacts used in the course. Artefacts consisted of three types of handouts:

- **Role-play instructions:**
  - instructions for the IMGs: short patient history, presenting problem, task;
  - instructions for the simulated patient: presenting problem, outline of patient behaviour/reaction to doctor proposal and/or hidden agenda;
  - clinical examination results (to be enquired from the ‘examiner’ who was usually played by one of the IMGs or, if present, by the ME).

- **‘Language banks’** consisting of communication strategies/sample phrases for:
  - the different stages in the medical interview (e.g., taking a history, managing long-term illness);
  - templates of consultations covering specific ethical, cultural or communication issues (e.g., breaking bad news, addressing child abuse, taking a sexual history).

- **Medical information sheets** providing additional information for:
  - medical policies and guidelines (e.g., obligation to report HIV infections);
  - helpful tips for including medical measurements in consultations (e.g., how to explain the notion of standard drink to patients).

Notes were taken on the brief introductory talks by the LE, role-plays, general classroom discussion and informal conversations during break time. Initial notes were collected in real-time during the class and were recorded in one of four categories as shown in Box 2.

<table>
<thead>
<tr>
<th>General description</th>
<th>Language</th>
<th>Behaviour</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Content summaries</td>
<td>Physical movements</td>
<td>Preliminary ideas, theories</td>
</tr>
<tr>
<td>Setting (class or break)</td>
<td>Verbatim quotes</td>
<td>Positioning</td>
<td>Personal comments</td>
</tr>
<tr>
<td>Discussions (topic, predominant speakers)</td>
<td></td>
<td>Displays of emotion</td>
<td>Reminders for further consideration</td>
</tr>
<tr>
<td>Role-play (task, participating IMGs)</td>
<td></td>
<td>Non-verbal behaviour</td>
<td></td>
</tr>
</tbody>
</table>

General information such as the date, session number, and topic(s) covered in the session was noted, and attendance and gender distribution were recorded on a seating chart.

On the days immediately following the observations I de-identified all information, expanded my original insights into more descriptive field notes and added further reflective comments. These rich field notes in conjunction with the collected artefacts form the foundation for the analysis presented here.

3.4. Data analysis

Data analysis commenced with the data collection, and continued throughout and beyond the observations. Data were coded using NVivo 8 (QSR International Pty Ltd., 2008). The analytic process progressed through three stages. In the initial stage, labels were freely assigned to the field notes using a line-by-line approach (Richards, 2003). In the second stage, categories were developed from those preliminary labels (Richards, 2003; Strauss & Corbin, 1998). Coding was driven by
three aims: firstly, to uncover the underlying beliefs expressed by the IMGs in relation to the use of everyday and medical language in medical communication, secondly, to reveal common strategies adopted by IMGs when dealing with both types of language during role plays simulating medical interactions, and thirdly, to ascertain whether these actions matched the beliefs they expressed.

In the final stages of data analysis, conceptual associations were established between the different types of data (artefacts or field notes) and across modes of interaction (role plays, feedback, general discussion, and informal conversation). Newly collected and already coded data were reviewed and categories re-assigned on a weekly basis. This approach allowed themes to emerge and interpretations to be formed progressively while the analysis remained open to new insights as the data collection continued. In addition, this procedure provided an opportunity for ongoing reflection to help refine and strengthen the conceptual links between the coded data and the developing analysis, promoting theoretical saturation (Richards, 2003).

4. Findings

This section presents and comments on preliminary findings relating to issues of medical terminology in cross-linguistic encounters that have not been addressed in previous studies or have received only marginal attention.

Findings reveal that only a small number of IMGs in each of the observed courses were aware of meaning divergences concerning medical terminology. None of the data indicates that the IMGs were conscious of differences between doctors and patients in perceptions of what constitutes a ‘medical term’. However, some of the data suggest that the IMGs experienced problems in distinguishing English lay terms from medical terminology. Various discrepancies emerged between the beliefs expressed and actions (as evident from their ‘actions’ in the role plays) adopted by the IMGs in relation to the two process skills. These results are presented below using detailed examples from the role plays and potential links to the IMGs’ English proficiency and their terminological awareness are discussed.

Section 4.1 discusses beliefs and (mis-)matching actions taken by IMGs regarding the clarification of unclear statements, and Section 4.2 follows the same structure concerning the avoidance of medical terms/use of easily comprehensible language. Here, the notion of (mis-)matched actions refers to the correspondences between the beliefs expressed by the IMGs and the actual behaviours (i.e., actions) they adopted in the role-plays.

4.1. Clarification of unclear statements

4.1.1. Beliefs regarding the need for clarification

Statements\(^3\) made by IMGs in relation to the type of language in need of clarification are summarized in Table 2. From their thoughts, dissimilarities emerged in relation to clarifying everyday versus medical language. The issue of unfamiliar everyday language in the form of slang was repeatedly raised during breaks, where IMGs would trade newly acquired words (sometimes in whispers) or lament the sheer number of unfamiliar words they still had to learn (see Table 2). However, with regard to medical terminology, most of the IMGs did not express a need to clarify these language items. The majority of participants were not aware of the potentially troublesome phenomenon of meaning divergence in relation to (semi-technical) medical terminology. When the issue of diverging interpretation was raised (either by their peers or by the educators), some participants shook their heads in disbelief or even voiced their surprise (see Table 2).

Two general approaches to patient statements emerged from common IMGs’ statements:

1. Most IMGs felt that patient statements needed to be clarified if they contained everyday language and slang. Their general strategy can be summarized as:
   - Inquire about everyday language items or expressions that are unclear.

2. Only a minority of IMGs explicitly emphasized the risks of meaning divergences and stressed the additional need to clarify patients’ use of medical terminology. Along with the above strategy these participants adopted a further strategy that can be summed up as follows:
   - Amplify the meaning of potentially ambiguous words or medical terms when used by patients.

In order to increase awareness of the existence and potential communicative danger of meaning divergences among all participants, the educators frequently encouraged IMGs to also clarify apparent medical terms when used by patients, rather than concentrating only on unfamiliar lay English vocabulary. Suggestions by the educators during discussion in class included:

“Try to get the patient to tell you more about the word they use.”
“Find out the symptoms and see whether they fit [the term used].”
“Can you describe to me in more detail what happens to you when you are experiencing X?”

\(^3\) Readers are reminded that the RACGP approval did not allow any of the interactions to be recorded thus all quotations presented in this article were noted verbatim at the time of data collection.
The language banks also included phrases that IMGs should use to trigger patient narratives in an effort to uncover what patients meant when they used ambiguous language items (see Table 2). The next section focuses on the (mis-)match between the action adopted by IMGs in the actual role plays in relation to their beliefs and the instructions given by the educators.

4.1.2. (Mis-)matching actions: clarifying unclear statements

During the observed sessions, IMGs sought to clarify unclear statements in their various interactions with each other or in role-plays. However, in relation to the type of language items in need of clarification, the IMGs’ beliefs and actions did not always match (see Table 3). Implications of these mismatched actions in the case of both everyday language and medical terminology are discussed below.

Regarding everyday language, the measures taken by the participants to clarify individual words such as “junkie” during role-plays closely matched their expressed belief to “inquire about everyday language items or expressions that are unclear.” Yet, the IMGs failed to apply similar strategies when faced with novel expressions or idioms such as, “waking up with a jolt” (see Table 3). Usually, in cases where their actions did not match clarification needs, role-plays were unnecessarily prolonged and it took them considerably longer than expected to successfully conclude a case (as determined by AMC examination guidelines), if it was finished at all.

This is nicely illustrated in a memorable episode excerpted in Table 3. Here the failure to clarify idiomatic phrases caused great difficulty in arriving at a diagnosis. The patient Mitch – a fire fighter, repeatedly mentioned “tossing and turning” and “waking up with a jolt” but the IMG did not inquire about the meaning of these phrases. When Mitch confessed that his girlfriend “doesn’t like that I drink so much”, the doctor seemed determined that this case revolved around a drinking problem (rather than a mental health issue as it turned out to be). Only after Mitch stated repeatedly that he barely slept at night, did she start inquiring about his sleep habits and the violent awakenings, thus eventually diagnosing him with post-traumatic stress disorder.

Table 2
IMGs’ statement in relation language in need of clarification.

<table>
<thead>
<tr>
<th>Mode of interaction</th>
<th>IMG statements relating to everyday language items</th>
<th>IMG statements relating to meaning of (semi-technical) medical terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>During breaks</td>
<td>‘I have this new slang “fag”. My daughter told me it’s homosexual.’ ‘There is so many slang in Australia. I never learn all. I can never know like medical terms.’</td>
<td></td>
</tr>
<tr>
<td>In response to language banks (LB)</td>
<td>LB: ‘Do you take anything else like marijuana or speed?’ IMG: ‘But the speed is slang, or?’</td>
<td>LB: ‘You should be careful with the term chronic. Some patients might think it means severe. So maybe use long or ongoing instead.’ IMG: ‘Why is this so? It is a term, it only means chronic.’</td>
</tr>
<tr>
<td>During classroom discussion (CD)</td>
<td>‘But what does it actually mean for a lay person – to be vegetable? Is it everyday language that you [LE] would use?’</td>
<td>‘Be careful with consciousness. It has different interpretation and signs from lay to professional.’</td>
</tr>
</tbody>
</table>

Table 3
Match of IMGs actions and beliefs.

<table>
<thead>
<tr>
<th>Mode of interaction</th>
<th>Inquire about everyday language items or expressions that are unclear</th>
<th>Amplify the meaning of potentially ambiguous words or medical terms when used by patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-play (RP) (a) matched action</td>
<td>‘What do you mean by junkie?’ ‘I don’t know buck’s. Can you explain?’ ‘What is the meaning of spew?’</td>
<td>Patient (P): ‘I have had really heavy periods in the last six months’ IMG: ‘What do you mean exactly by heavy periods? What do you mean by heavy? Do you have to change pads more often?’</td>
</tr>
<tr>
<td>RP instruction</td>
<td>‘I don’t know one-night stand.’ ‘What does lightheaded mean?’ ‘So groggy means being drunk?’</td>
<td></td>
</tr>
</tbody>
</table>
Actions taken by IMGs during role-plays to amplify the meaning of vague statements or medical terms matched their belief only in the two cases presented in Table 3. As previously noted only some of the IMGs highlighted the potential for miscommunication created by semi-technical terms. Considering the educators' encouragements to clarify semi-technical terms and vague patient statements (see Section 4.1.1), the mismatch between approach and instruction seems even more pronounced. Despite the fact that patients did use potentially ambiguous medical terms like “cramp” or “seizure”, the meaning of such terms was not questioned in the role-plays.

In general, the possibility of meaning divergences was only rarely addressed in the group discussion following role-plays, perhaps because these discussions focused mostly on the actual outcome of the role-play and less on specific language items. It stands to reason that difficulties related to everyday and medical language may not receive much attention in role-play feedback because it would be too time-consuming to discuss these issues individually. Furthermore, other communication skills (e.g., showing empathy by acknowledging patient concerns) usually take precedence over English proficiency issues unless language problems cause the interaction to break down.

In Section 4.1.1 it was also discussed that for most participants the idea of meaning divergence appeared to be a novel concept, and not one that they had previously considered. This may partly explain the observation that the IMGs only occasionally took steps to clarify potentially ambiguous medical terms. Further investigations could help to reveal the underlying mechanisms that keep IMGs from clarifying possible meaning divergences even after having been made aware of the fact that such divergences exist.

4.2. Use of easily comprehensible language and avoidance/explanation of medical jargon

4.2.1. Beliefs regarding the use of medical terminology

Table 4 provides a summary of statements made by IMGs concerning the use of medical terminology in consultations during breaks and classroom discussions. IMGs emphasized the significance of avoiding medical terms, especially for passing the AMC clinical exam. Judging from their assertions, there appeared to be a near-universal belief among the IMG participants that medical terms should not be used in consultations with patients.

Research shows that the IMGs’ insistence on avoiding all medical terms is not based on sound evidence. For example, one of McDonell and Usherwood’s (2008) supervisor informants revealed that sometimes patients “may not [take it] so well [when IMGs] give advice [in] ‘pure’ English without jargon” (p. 482). Ogden et al. (2003) found that patients actually preferred the use of medical terms when receiving a diagnosis from their doctor, because it helps patients take ownership of their illness. The guidelines and suggestions provided by the educators of the RMLBC also underline the benefits of using medical terms in certain circumstances, but they also frequently stress that, if medical terms are used, they should be adequately explained. None of the language banks stated that medical terms should be avoided; instead, they gave the following advice and examples with regard to appropriate language:

- Use everyday words or explain medical terms and jargon
- Disclose the diagnosis simply and directly as in:
  - “All the evidence points to Parkinson's disease.”

The source of the IMGs’ apparently firmly held belief is thus difficult to trace, especially considering the fact that they were regularly encouraged to use medical terms in suitable situations. Unfortunately, there are no publically available guidelines outlining how the use of medical terminology should be judged by examiners of the AMC clinical exam. The AMC handbook of clinical assessment, however, provides some information on the topic (AMC, 2007):

- Once the diagnosis has been made, it should be stated to the patient using both medical and lay terminology appropriate to the patient’s understanding (p. 48).
- Explanation, using language that the patient understands (no jargon) (p. 50).

At first, these instructions might seem contradictory as far as their reference to medical terms or jargon is concerned. In general, the term ‘jargon’ can be used as either a neutral description of technical medical terminology or with more negative connotations.

<table>
<thead>
<tr>
<th>Mode of interaction</th>
<th>IMGs’ statements about the use of medical terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>During breaks</td>
<td>‘You cannot use terms because you are not allowed in the exam’</td>
</tr>
<tr>
<td></td>
<td>‘The examiner will give you less marks when you use terms all the time’</td>
</tr>
<tr>
<td></td>
<td>‘I will fail the exam when I use the jargon’</td>
</tr>
<tr>
<td>During CD</td>
<td>‘You have two language systems. [...] One for talking to colleagues and the other for talking to patients. [...] you should just use simple language with patients’</td>
</tr>
<tr>
<td></td>
<td>‘There were too many terms that she didn’t say [explain] to the patient in detail’</td>
</tr>
</tbody>
</table>
connotations to refer to the unnecessary use of such terminology in contexts where it is unlikely to be understood. This ambiguity is particularly interesting for IMGs whose depth of lexical knowledge might not extent beyond the neutral definition of ‘jargon’ and which might lead to the omission of all technical terms instead of just the use of terminology in inappropriate contexts. Nevertheless, the guidelines actually converge in the goal for doctors to adapt their explanations to individual patients. The idea of tailoring the information to the patient’s needs is certainly not a new concept in patient-centred care but it may be a new idea for some IMGs with foreign medical training (cf. McDonnell & Usherwood, 2008; Stewart et al., 2003). Again, it stands to reason that including the words “(no jargon)” may be misleading for some of the readers of the AMC handbook. Further research is needed to investigate how widespread such beliefs are among IMGs in Australia, and if so, to find out how they are formed in the first place.

However, despite their strong beliefs regarding the use of terminology, IMGs also often experienced difficulties in distinguishing everyday language and medical terminology and asked the LE for help:

“Blackout – is this a lay or technical term?”
“Malignant – can I tell this to the patient?”
“Will the patient understand when I ask her about diabetes?”
“Is cold turkey medical English word?”

It seems rather incongruous that the participants were quite adamant in their assertions that medical terms are “bad for talking to the patient” but at the same time they could not sufficiently identify language items that belong in the category ‘medical term.’ Additional research could aid our understanding of this conundrum by exploring which words IMGs perceived to be medical terms, and how their perception affects their language choice in consultations.

4.2.2. (Mis-)matching actions: use or avoidance of medical terminology
The role-play observations indicate that the actions taken by the IMGs to relay important medical information in an easily comprehensible way did not always match their belief that medical terminology must be avoided in consultations. Table 5 offers an overview of the different approaches that were applied and shows that IMGs either used or avoided medical terms. Approaches that avoid technical language will be discussed in Section 4.2.2.1 and actions involving the use of terminology in Section 4.2.2.2.

4.2.2.1. Avoiding medical terminology in role-plays. Matching their belief, IMGs frequently appeared to be trying to avoid medical terms altogether but their attempts often proved to be of limited success due to their English proficiency. Failing to find

Table 5
(Non-) use of medical terminology in role-plays.

<table>
<thead>
<tr>
<th>Overall strategy</th>
<th>IMG action</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoiding medical terms</td>
<td>Stuttering, false starts and hedging while searching for subjectively suitable lay vocabulary</td>
<td>‘Have you used any pill? … any birth control?… any – uhm – any?’ ‘Apart from – sleep – uhm sleepiness – sleepiness?’</td>
</tr>
<tr>
<td></td>
<td>Revert to using medical terms for lack of subjectively suitable lay vocabulary</td>
<td>‘How about the nappy? Any like – uhm – like diarrhea?’ ‘At the moment you just don’t want to go out because you feel tachycardia – palpitations?’</td>
</tr>
<tr>
<td>Using medical terms</td>
<td>Using lay description to explain terms</td>
<td>‘There is an organ in our body called pancreas. It produces insulin which controls the blood sugar levels’ ‘I want to talk about something with you. You know these secondary deposits – it means that your cancer is going to an advanced stage’</td>
</tr>
<tr>
<td></td>
<td>Using analogies/metaphors to explain terms</td>
<td>‘Imagine a pipe with a bit of blockage. Deposits build up and cause less blood flow’ ‘Your body is like a machine that is wearing out’</td>
</tr>
<tr>
<td></td>
<td>Using patient’s prior knowledge to explain terms</td>
<td>‘What do you know about diabetes?’ ‘It gives the whole picture of hypothyroidism. Do you know what this means?’ ‘Palliative care – have you heard about it?’</td>
</tr>
<tr>
<td></td>
<td>Using medical terms to explain other medical terms</td>
<td>‘Convulsion – fever is generally high fever. Like a fit. You know fit? It’s like a seizure’</td>
</tr>
<tr>
<td></td>
<td>Routine insertion of lay equivalents to explain terms</td>
<td>‘Do you have any myalgia – muscle pain?’ ‘I will send you to an endocrinologist – the specialist’ ‘Sometime it can cause arrhythmia – a heart problem’ ‘When you ovulate – when your egg comes out’</td>
</tr>
<tr>
<td></td>
<td>Using medical terms without explanations</td>
<td>‘And CD4 is another blood test’ ‘Another test is called Viroload’ ‘We do tests but in the window period we cannot tell you the result’ ‘The CD4 and Viroload we do now and in other test check for lipoma’ ‘The results are only for human deficiency virus not AIDS’</td>
</tr>
</tbody>
</table>
appropriate everyday words, IMGs often stuttered or fell silent completely. Table 5 shows that on many occasions false starts or stammers coincided with the inability to find a suitable lay explanation, and eventually the IMGs sometimes resorted to the medical term. During feedback discussions, some doctors acknowledged this sort of failure by stating (for instance) “I wanted to say insomma but I didn’t know the lay term.”

In some role-plays, the medical graduates became overwhelmed by their own hesitations. Long pauses turned into prolonged periods of silence and eventually the IMGs would stop speaking to their patients completely and the whole consultation was terminated either by the LE, or when the doctor simply ‘gave up’. In the follow-up discussion the LE would try to pinpoint the crucial problem. Usually the doctors would answer along the lines of: “I knew it in my head but I didn’t know how to say you.”

These observations are important as patients may misinterpret hesitations on the part of a doctor. For example, patients may suspect that their doctor is withholding important information from them, or that the doctor is reluctant to present them with the correct information (Majumdar et al., 1999). Ironically, the reality could not be further from these suspicions. Overall, attempts to avoid medical terminology were often observed to increase the communicative burden instead of making the explanation easier to follow, especially if the complete evasion of medical terms could not be achieved.

4.2.2.2. Using medical terminology in role-plays. In contrast to their belief, many IMGs followed the suggestions from the educators and did use medical terms during the role-plays. The participants most frequently provided medical terms first, and then used them as the foundation for further explanation. Elaborations took various forms, from inserting mere lay equivalents and employing analogies to providing fully-fledged descriptions and tailoring information based on prior patient knowledge (see Table 5). Using medical terms as a baseline seems to be an appropriate and useful strategy facilitating shared understanding between doctor and patient. It also allowed the IMGs to target information more closely to the patient’s needs and prior knowledge, and, in most cases, it helped to decrease the amount of technical information provided (see Table 5).

Although using medical terms followed by elaboration is quite a successful technique, it is not without its pitfalls. IMGs were sometimes unable to clarify the meaning of one medical term without using another medical term (see Table 5). There are also dangers involved in routinely inserting glib lay ‘equivalents’. In relation to instructing doctors in patient-centred care, Epstein (2000, p. 806) states that “the goal is not the politically correct interview that contains a requisite number of open-ended questions and empathic-sounding responses.” He highlights that while a consultation may include patient-centred behaviours it still may not be genuinely patient-centred. The same is true for some of the IMGs who seemed to habitually insert lay ‘translations’ of medical terms in an effort to meet the patients’ needs for explanation, but who failed to assess whether their patients were actually in need of this kind of clarification (see Table 5). Hence, a word of caution may alert IMGs to the fact such over generalizing behaviour may give the impression (to patients) of a doctor who is simply going through the motions and not genuinely engaged in the act of communicating with them.

However, the most significant complication regarding the use of medical terms was that every now and again medical explanations became convoluted with unexplained terminology, increasing the communicative burden between IMGs and patients. In a pre-HIV test counselling session, for example, one of the IMGs produced several medical terms referring to different blood tests and possible test-result scores to her patient without explaining any of them in everyday language (see Table 5).

During this consultation the patient showed signs of becoming frightened, repeatedly wringing his hands, shifting in his chair and looking at the doctor with an expression of wonder and puzzlement. The doctor, however, did not seem to be concerned by this behaviour and continued to talk about necessary tests and the importance of practicing safe sex without waiting for patient feedback or checking patient understanding. The consensus of the group evaluation that followed was that the IMG was trying too hard to provide the patient with all medically important information while failing to explore his feelings about the HIV test. This shows how the extensive use of medical terminology can affect other important medical communication skills, in this case skills related to providing patient-centred care (cf. also Stewart et al., 2003).

5. Discussion

The overarching aim of this study was to add further insights into commonly identified linguistic challenges faced by NNES IMGs, and to develop a better understanding of how these difficulties are approached in ESP course for medical professionals. Most studies focussing on IMG orientation and training have highlighted the challenges of lay English vocabulary but have only marginally addressed issues related to the use of terminology (e.g., McDonnell & Usherwood, 2008; Pilotto et al., 2007; Webber, 1995). Webber (1995) even asserts that medical language should not be covered in detail because it is usually well-known among doctors. In the observations undertaken in the present study, IMGs often exhibited a good knowledge of English technical terms but there was a general lack of awareness of meaning divergences that can occur when patients use medical terms. Furthermore, some participants encountered problems distinguishing between those technical terms that are generally limited to communication between medical professionals, and (semi-technical) terms that are also used by laypersons. Consequently, it can be argued that an IMG’s ‘knowledge’ of English medical terminology is not necessarily enough to warrant its exclusion from medical ESP courses, especially because the use of such terms, by either doctor or patient, can still create problems and increase the communicative burden in clinical encounters.
Findings from the present study suggest that terminological issues do need to be addressed in ESP courses for medical professionals, thus supporting Hoekje’s (2007) recommendation that both lay and medical language should be included in such courses. However, where Hoekje cites benefits for intra-professional communication as a rationale for the inclusion of medical terms in language training, the present study shows that addressing concerns, such as divergences in the meaning and perception of medical terms, is also essential to achieving shared understanding between professionals (IMGs, in this case) and their patients. In addition to highlighting the importance of terminological issues in ESP courses, this research also adds a new perspective by looking at how (and whether) IMGs actually apply the strategies they are taught in the orientation/communication skills courses. Even when the participants were given appropriate instructions and strategies to overcome language barriers that arose in the role-plays, they did not always apply them. Moreover, IMGs sometimes even adopted a completely different strategy, such as attempting to avoid medical terms altogether, despite receiving advice to the contrary. Such observations have important implications for ESP course developers and teachers, and suggest that the use of certain strategies may need to be reinforced through repeated practice if they are to become accepted, internalised and used in a consistent and appropriate manner. Further research and controlled intervention will help shed more light on the actual adoption of communication strategies, and ways in which this can be facilitated.

6. Conclusions and implications

This exploratory study has revealed that only a minority of the IMG participants were aware of meaning divergences concerning medical terminology, and that despite explicit instructions the majority of IMGs failed to clarify the meaning of semi-technical terms used by patients in the role-plays. None of the IMGs seemed to be aware that the perception of what constitutes a medical term differs between patients and professionals. Nevertheless, they encountered perceptual difficulties in trying to distinguish English lay from medical terminology.

In relation to the targeted process skills, the study found that the IMGs’ convictions and actions were often mismatched. Findings show that the participants were very clear about which types of language should be clarified, yet especially unfamiliar idiomatic expressions, for which IMGs did not seek clarification, were found to create communication problems in the role-plays. Most of the participants rejected the use of medical terminology in consultations. The observations revealed, however, that due to their limited proficiency IMGs had trouble finding suitable everyday ‘equivalents’ in the role-plays. Therefore, they fared considerably better when using medical terms as a foundation for further explanations. Overall, the findings suggest that the level of awareness among these participants of terminological issues as well as their overall English proficiency levels and limited exposure to colloquialisms may affect the development of their medical communication skills, and, in turn, the quality of doctor–patient communication.

The findings also highlight areas that deserve particular attention in teaching IMGs to communicate medical information efficiently and effectively. Firstly, in relation to the clarification of unclear statements, medical communication programs could place greater emphasis on the importance of clarifying idiomatic expressions. Secondly, concerning the language used in consultations, educators should note that IMGs may need to be reminded and, if necessary, reassured that it is not ‘wrong’ per se to use medical terms. Furthermore, the method of recording role-plays and using the video for subsequent group feedback may also prove to be effective tool in the acquisition of communication skills (cf. Maguire & Pitceathly, 2002). Where role-plays can hardly be stopped to discuss single inappropriate words or terms or to highlight that the meaning of a word or idiom should have been clarified at that point, video would allow much richer feedback in these areas.

While the data discussed here can certainly make a contribution to the way IMGs are instructed in the future, several limitations of the current study have to be considered. Given that this study focused only on one particular language course for IMGs and due to the fact that the language educator also played the role of ‘patient’ in all simulated consultations, the results cannot be generalised to all IMGs in Australia, or even the language or communication courses that are offered. Nevertheless, the findings do provide important initial insights into the way that beliefs and strategies about everyday language and medical terminology can impact on IMG-patient communication. Moreover, many of the problems discussed here are also relevant to NES doctors. While difficulties might be exacerbated for IMGs in relation to unfamiliar idiomatic expression, NES professionals may also struggle to gauge the level of understanding among their patients or to realise which lexical items might be too technical to be used in consultations (cf. Bourhis et al., 1989; Koch-Weser et al., 2009). Further research is warranted to reveal the intricacies underlying the development of IMGs’ beliefs and to find out why these doctors adopt suitable matching actions in some cases but fail to do so in others.

Acknowledgments

This research presented in this paper is supported by the Macquarie University Research Excellence Scholarship (MQRES) at Macquarie University, Australia. The author would like to offer sincere thanks to all the IMGs who participated in this project as well as the medical and language educator involved in the medical language bridging course and Susan Jones, project manager at the RACGP. The author would like to thank Lindsay Ferrara and Dr. Peter Roger as well as the two anonymous reviewers for their valuable comments on earlier drafts of this paper.
Maria R. Dahm / English for Specific Purposes 30 (2011) 186–197

References


QSR International Pty Ltd. (2008). NVivo qualitative data analysis software (Version 8).


Maria R. Dahm is a PhD candidate at Macquarie University, Australia where she investigates the impact of medical terminology on English-medium consultations, focusing in particular on situations where either the doctor or the patient is a non-native speaker of English. Maria holds an M.A. in Linguistics (University of Constance, Germany).